

*Department of Ocean and Resources Engineering  
Seminar*

**Capstone Design: Preliminary Design of a Seawater  
Air-Conditioning System for the Honolulu Airport,  
Hickam Air Force Base and Pearl Harbor**

By

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**MSB 114**

3:00-3:30 pm Coffee Hour

3:30-4:30 pm Seminar

Please join us for the coffee hour near the seminar venue a half hour  
before the seminar, 3:00 – 3:30 pm

**Abstract**

Seawater air-conditioning systems provide an alternative to energy-consuming conventional air-conditioning systems. Cold seawater pumped from depths of greater than 1600 feet can be used as a heat sink for buildings with central air-conditioning systems. Two teams will present concepts for providing seawater air-conditioning for the Honolulu Airport, Pearl Harbor, and Hickam Air Force Base. The presentations will detail the ocean engineering design considerations of a seawater air-conditioning system. Additionally the thermodynamic analysis and economic feasibility of each team's concept will be presented.